

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Please rewrite claims 1, 3-5, 7, 8, 12, 13, 15, 18, 19, 22, 23, 25, 28 and 30-34 as follows.

Listing of Claims:

1. (currently amended) A lithium secondary cell comprising:

an inner electrode body impregnated with a non-aqueous electrolyte, ~~made up of~~
including a positive electrode and a negative electrode each ~~made of~~ comprising at least one
metallic foil wound or laminated together; and

a positive electrode collector and a negative electrode collector to lead out a current from
the inner electrode body,

wherein ~~the~~ edges of said metallic foils of said positive electrode and/or said negative
electrode are arranged such that ~~and~~ predetermined parts of said arranged edges of said metallic
foils and predetermined parts of said positive electrode collector and/or said negative electrode
collector, respectively, are joined together to lead out a current from said inner electrode body, ~~and~~
~~of the edges of said metallic foils, the arranged edges (joint edges) to be joined to said~~
~~predetermined parts of said positive electrode collector and/or said negative electrode collector~~
~~and said predetermined parts of said positive electrode collector and/or said negative electrode~~
~~collector are joined together.~~

wherein prior to joining said metallic foils to said collectors, said predetermined parts of
said collectors are thicker than remaining parts of said collectors.

2. (original) The lithium secondary cell according to claim 1, further comprising an electrode cover including internal terminals, external terminals and a cell cover, wherein said positive electrode collector and/or said negative electrode collector are connected to said internal terminals using electrode leads.

3. (currently amended) The lithium secondary cell according to claim 1, wherein said positive electrode collector and/or said negative electrode collector ~~also~~ serve as an electrode cover.

4. (currently amended) The lithium secondary cell according to claim 1, wherein said joint edges of said metallic foil constituting said positive electrode (~~positive electrode metallic foil~~) and a joint having a joint surface at ~~the~~ an edge that extends from said predetermined part of said positive electrode collector to said joint edges are joined with ~~the~~ a narrow end face of said joint edges facing said joint surface.

5. (currently amended) The lithium secondary cell according to claim 4, wherein said positive electrode metallic foil and said positive electrode collector ~~are made of~~ comprise aluminum or an aluminum alloy.

6. (original) The lithium secondary cell according to claim 1, wherein said predetermined part of said positive electrode collector is the edge of said positive electrode collector.

7. (currently amended) The lithium secondary cell according to claim 1, wherein said joint edges of said metallic foil constituting said negative electrode (~~negative electrode metallic foil~~) and a joint having a joint surface at ~~the~~ an edge that extends from said predetermined part of said negative electrode collector to said joint edges are joined with ~~the~~ a side near said joint edges adhered to said joint surface.

8. (currently amended) The lithium secondary cell according to claim 7, wherein said negative electrode metallic foil and said negative electrode collector ~~are made of~~ comprise copper or a copper alloy.

9. (original) The lithium secondary cell according to claim 7, wherein said side is adhered to said joint surface by bending the part near said joint edges.

10. (original) The lithium secondary cell according to claim 7, wherein columnar crystals are formed from said metallic foil toward said negative electrode collector at the joint between said negative electrode metallic foil and said negative electrode collector.

11. (original) The lithium secondary cell according to claim 1, wherein said predetermined part of said negative electrode collector is the edge of said negative electrode collector.

12. (currently amended) The lithium secondary cell according to claim 4, wherein the joint between said joint edges of said positive electrode metallic foil and said predetermined part of said positive electrode collector (~~positive electrode joint~~) is formed by irradiating a convex part protruding toward said joint edges formed on said predetermined part of said positive electrode

collector with energy beams, melting said convex part of said positive electrode collector and welding said convex part of said positive electrode collector with said joint edges of said positive electrode metallic foil.

13. (currently amended) The lithium secondary cell according to claim 7, wherein the joint between said joint edges of said negative electrode metallic foil and said predetermined part of said negative electrode collector (~~negative electrode joint~~) is formed by irradiating a convex part protruding toward said joint edges formed on said predetermined part of said negative electrode collector with energy beams, melting said convex part of said negative electrode collector and welding said convex part of said negative electrode collector with said joint edges of said negative electrode metallic foil.

14. (original) The lithium secondary cell according to claim 1, wherein said positive electrode collector and/or said negative electrode collector is a cross-, Y- or I-figured tabular collector or a circular collector with partial notching.

15. (currently amended) The lithium secondary cell according to claim 1, wherein said positive electrode collector and/or said negative electrode collector ~~is formed of said~~ comprises a convex part and ~~other a~~ a flat part and the difference between the thickness (L_2) of said convex part and the thickness (L_1) of said flat part is 0.1 mm or more.

16. (original) The lithium secondary cell according to claim 15, wherein the thickness (L_1) of said flat part of said positive electrode collector is 0.4 mm or more.

17. (original) The lithium secondary cell according to claim 12, wherein the thickness (L_2) of said convex part of said positive electrode collector is 0.6 mm or more.

18. (currently amended) The lithium secondary cell according to claim 12, wherein when said positive electrode joint is formed, said energy ~~beam is~~ beams are irradiated onto said predetermined part at an angle θ ($0^\circ < \theta \leq 90^\circ$) with respect to the normal to the plane including said narrow end face of said positive electrode metallic foil.

19. (currently amended) The lithium secondary cell according to claim 12, wherein when said positive electrode joint is formed, the power density of said energy ~~beam~~ beams at the irradiation point is 3 kW/mm² or more.

20. (original) The lithium secondary cell according to claim 15, wherein the thickness (L_1) of said flat part of said negative electrode collector is 0.2 mm or more.

21. (original) The lithium secondary cell according to claim 13, wherein the thickness (L_2) of said convex part of said negative electrode collector is 0.4 mm or more.

22. (currently amended) The lithium secondary cell according to claim 13, wherein when said negative electrode joint is formed, said energy ~~beam is~~ beams are irradiated onto said predetermined part at an angle θ ($0^\circ \leq \theta \leq 30^\circ$) with respect to the normal to the plane including said side of said negative electrode metallic foil.

23. (currently amended) The lithium secondary cell according to claim 13, wherein when said negative electrode joint is formed, the power density of said energy ~~beam~~beams at the irradiation point is 6 kW/mm² or more.

24. (original) The lithium secondary cell according to claim 15, wherein when said negative electrode joint is formed, if the thickness of said convex part is L₂ (mm) and said power density is E (kW/mm²), the following Expression (1) is satisfied.

[Mathematical expression 1]

$$L_2 \leq E/7 \dots (1)$$

25. (currently amended) The lithium secondary cell according to claim 13, wherein an irradiation point of said energy ~~beam~~of beams on said negative electrode collector has a flat shape.

26. (original) The lithium secondary cell according to claim 25, wherein the spot diameter of said irradiation point is 1 mm or less.

27. (original) The lithium secondary cell according to claim 12, wherein said positive electrode collector is placed in such a way that said convex part crosses said narrow end face of said positive electrode metallic foil at quasi-right angles.

28. (currently amended) The lithium secondary cell according to claim 12, wherein said energy ~~beam is~~ beams are irradiated onto said convex part of said positive electrode collector at quasi-right angles with respect to the line crossing said narrow end face of said positive electrode metallic foil at quasi-right angles.

29. (original) The lithium secondary cell according to claim 13, wherein said negative electrode collector is placed in such a way that said convex part crosses said side of said negative electrode metallic foil at quasi-right angles.

30. (currently amended) The lithium secondary cell according to claim 13, wherein said energy ~~beam is~~ beams are irradiated onto said convex part of said negative electrode collector at quasi-right angles with respect to the line crossing said side of said negative electrode metallic foil at quasi-right angles.

31. (currently amended) The lithium secondary cell according to claim 12, wherein said energy ~~beam is~~ beams are not directly irradiated onto said metallic foil.

32. (currently amended) The lithium secondary cell according to claim 1, wherein neighboring metallic foils are placed ~~with such that a certain gap kept in between is present~~ therebetween.

33. (currently amended) The lithium secondary cell according to claim 12, wherein said energy ~~beam is~~ beams comprise a laser or electron-beam beams.

34. (currently amended) The lithium secondary cell according to claim 33, wherein said energy ~~beam is~~ beams are a continuous wave.

35. (original) The lithium secondary cell according to claim 33, wherein said laser is a YAG laser.

36. (original) The lithium secondary cell according to claim 12, wherein a joint material for supporting the joint between said positive electrode collector and said positive electrode metallic foil is applied to said positive electrode metallic foil and/or said predetermined part of said positive electrode collector or inserted between said positive electrode metallic foil and said predetermined part of said positive electrode collector and formed by irradiating said predetermined part of said positive electrode collector and said joint material with an energy beam and thereby melting the two and welding said melted predetermined part of said positive electrode collector and said joint material to said joint edges of said positive electrode metallic foil.

37. (original) The lithium secondary cell according to claim 13, wherein a joint material for supporting the joint between said negative electrode collector and said negative electrode metallic foil is applied to said negative electrode metallic foil and/or said predetermined part of said negative electrode collector or inserted between said negative electrode metallic foil and said predetermined part of said negative electrode collector and formed by irradiating said predetermined part of said negative electrode collector and said joint material with an

energy beam and thereby melting the two and welding said melted predetermined part of said negative electrode collector and said joint material to said joint edges of said negative electrode metallic foil.

38. (original) The lithium secondary cell according to claim 1, which has a capacity of 2 Ah or more.

39. (original) The lithium secondary cell according to claim 1, which is to be mounted on a vehicle.

40. (original) The lithium secondary cell according to claim 39, which is used for an electric car or hybrid electric car.

41. (original) The lithium secondary cell according to claim 39, which is to be used to start an engine.